

## **RCRA FACILITY FACT SHEET**

### **Sinclair Casper Refining Company**

P.O. Box 510

Evansville, Wyoming 82636

### **FACILITY BACKGROUND**

The Sinclair Casper Refining Company (Sinclair), formerly known as Little America Refining Company (LARCo Refinery), is an operating petroleum refinery located approximately one mile northeast of Casper, Wyoming in the town of Evansville. The refinery consists of two parcels of land separated by the North Platte River. The operating areas are located along the southern boundary of the river. The North Evaporation Ponds are located north of the North Platte River and receive the refinery's treated waste water. The refinery has been operating since 1923 and was purchased by LARCo Refinery from Mobil Oil Corporation in 1968. The refinery currently produces more than 800,000 gallons of product per day.

The Environmental Protection Agency (EPA) issued LARCo Refinery a Federal RCRA permit on September 26, 1994 for operation and/or closure of four regulated units and facility-wide corrective action pursuant to a July 23, 1991 Federal Consent Decree. The State issued an equivalent and replacement permit to the federal permit on January 1, 1997. The January 1, 1997 Permit was modified on December 9, 2003 based on the five year permit review. The federal permit terminated on April 26, 1999. The permit contains operating and closure requirements for the Aggressive Biological Treatment Unit (ABTU) used to treat the refinery's waste water, and the K051 Tank to store API Separator Sludge prior to off-site disposal. The permit also contains clean closure requirements for two inactive unlined surface impoundments that received refinery wastewater. Corrective action requirements are contained in the State permit.

### **ENVIRONMENTAL CONCERNS**

Hydrocarbon and metals contamination from refinery operations have been identified in the soils and groundwater in and around the refinery. This includes contamination identified in groundwater beneath the Brookhurst Subdivision located on the east side of the refinery, and contamination in soils and groundwater in the north refinery area along the North Platte River. Approximately 41 areas have been identified where past or present wastes were/are managed (referred to as Solid Waste Management Units), and there are an additional 6 areas identified where there is concern environmental impacts may be present.

### **CORRECTIVE ACTION**

In the 1980s and early 1990s, Sinclair implemented interim actions to address immediate concerns related to releases of contamination to the Brookhurst Subdivision and the North Platte River. For the Brookhurst Subdivision, these actions included providing a

public water supply, purchasing property in the subdivision and installing a remediation system (Soil Vapor Extraction and Biosparging) along the east refinery boundary. Sinclair installed an Interceptor Drain System along a portion of the North Platte River in the north refinery area to help prevent releases to the river.

Sinclair conducted a phased RCRA Facility Investigation (RFI) beginning in the early 1990's to determine the nature and extent of contamination on-site and off-site of the refinery's property. The Final May 28, 2004 South and North Properties Phase 3 RFI Reports provide a summary of those investigations. The reports were approved by the Department on October 20, 2004.

Based on the RFI investigations and groundwater modeling, the Department determined that additional measures were necessary to prevent hydrocarbon releases to the North Platte River. In late 2005, Sinclair constructed a Low-Permeability Barrier (LPB) and sump to collect free phase hydrocarbon. The LPB is located adjacent to the river and extends west from the western end of the Interceptor Drain System (IDS) to a bedrock outcrop. Pumping groundwater at the eastern end of the IDS was initiated to help prevent contaminant migration around the end of the eastern end of the IDS.

The U.S. Fish and Wildlife Service conducted a study of the North Evaporation Ponds area in 2003 and 2004. Subsequently, Sinclair conducted investigations in the North Evaporation Ponds to define the extent of contamination, to evaluate potential migration of contaminated groundwater to off-site areas, and to evaluate the potential risk to ecological receptors. The results of these investigations are included in the May 28, 2004, North Property Final Phase III RFI Report, and the January 30, 2007 (as revised March 9, 2007 and April 5, 2007), Final Interim Ecological Risk Assessment.

The WDEQ and Sinclair agreed that while the refinery is operating, it would not be feasible to attempt to clean up the site to final cleanup levels that are protective for unrestricted uses of the property. Therefore, until the refinery ceases operations, Sinclair will conduct an "interim" corrective action that includes:

- \* Implementation of interim and stabilization measures to address immediate environmental concerns or threats, such as potential releases of contamination to the North Platte River or other off-site areas, and to eliminate/control sources of contamination;

- \* Off-site areas must be cleaned up to meet final cleanup objectives that are protective for unrestricted use of the property and ecological receptors, and groundwater must be cleaned up to Maximum Contaminant Levels;

- \* On-site areas must be cleaned up to levels that are protective for industrial use of the property and ecological receptors, and groundwater use and migration must be controlled; and

- \* Corrective action related milestones, such as the RCRA Facility Investigation, Corrective Measures Study (CMS) and Corrective Measures Implementation (CMI), are considered "interim" until such time the refinery closes and final cleanup objectives can

be implemented for the active on-site areas.

Sinclair submitted a Final Interim Human Health Risk Assessment on May 4, 2007. The results of the Human Health and Ecological Risk Assessments were used to identify site-specific interim cleanup requirements, and to determine high priority areas located on and off-site which pose an unreasonable risk to current and future industrial, residential and ecological receptors. A Final CMS Report for high-priority areas was submitted on July 2, 2009 and conditionally approved by the WDEQ on March 31, 2010. The CMI Work Plan for high-priority areas was submitted on August 11, 2010 and approved by the WDEQ on September 23, 2011. The CMS Work Plan for medium and low priority areas is scheduled to be submitted in 2013.

Per permit conditions, Sinclair must clean close the ASP and PEP within 60 days of completion of the CMI. Also per permit conditions, Sinclair must initiate closure activities for the ABTU within 30 days of receiving the final volume of hazardous waste at the unit, and must complete closure activities within 180 days of this date.

### **ENVIRONMENTAL INDICATORS**

Environmental Indicators ("EIs") are an EPA measure used to determine if contamination is being mitigated at or from facilities. RCRA authorized States, such as Wyoming, to make the determination whether a facility has met the EIs, and that information is reported to EPA. There are two types of EIs: 1) "Human Health Exposures Under Control"; and 2) "Migration of Contaminated Groundwater Under Control". Based on the information provided in the Final RFI Reports and the Final Interim risk assessments, the Department has determined that both of these EIs have been met.

### **PATH FORWARD TO MEETING EPA'S 2020 CORRECTIVE ACTION GOALS**

The Sinclair Casper Refining Company facility is located near the town of Evansville, WY and is surrounded primarily by industrial, commercial, residential and undeveloped land. The active refinery property consists of two land parcels separated by the North Platte River. The operating areas of the refinery are located south of the North Platte River, and the North Evaporation Ponds are located north of the river. Sinclair also owns approximately 120 acres immediately east of the active refinery in the Brookhurst subdivision, where a few private residences are located.

The WDEQ approved the CMI Work Plan for high priority areas in 2011. Per the current schedule in the CMI Work Plan, the WDEQ expects that all interim corrective measures for high priority areas will be implemented, and a final CMI Report will be approved, by 2017. The WDEQ anticipates that the CMS Work Plan for medium and low priority areas will be submitted and approved by 2013. A timeline for construction and implementation of interim remedies for medium and low priority areas will be proposed and approved as part of the CMI Work Plan for these areas. However, the WDEQ anticipates that Sinclair will complete construction of all interim remedies at the refinery by 2020.

## **PUBLIC INTEREST**

Throughout the cleanup process, Sinclair will keep the public informed of corrective action progress at the facility, and the public will have opportunity to comment on corrective action milestones such as the CMS and CMI reports, re-issuance of the permit and permit modifications. Public involvement will be conducted through public meetings, public notices and comment periods in area newspapers, and periodic mailings to nearby residents and businesses. All permit and corrective action documents are also available for review by the public at the information repository maintained at the Natrona County Public Library

## **FOR MORE INFORMATION**

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### **Information Repository:**

Natrona County Public Library  
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